# **Evaluating Indonesia Pension System After Reformation**

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### ABSTRACT

Since its last reformation in 2015, Indonesia pension system is still far behind comparing with other countries, especially in term of adequacy and sustainability. Meanwhile, Indonesia is urgently needed to have more adequate and sustain pension system because life expectancy is increasing over the years while the fertility rate keeps decreasing. It will lead to the increase of old people generations who need to be supported by the mature pension system. Plus, Indonesia will have demography bonus in 2030 and by then, the number of working populations will reach its peak and the amount of pension fund will also be increasing significantly. Thus, it needs better pension management in order to be utilized optimally and can be beneficial on behalf of greater Indonesia society in the future. This paper aim to evaluate current Indonesia pension system, see its issues, and give recommendation of how pension system in Indonesia should be.

Findings shows that Indonesia pension system is still very fragmented, there is different system for different occupation, maintained by different entities. The benefit also very varied across the occupation. Other than that, Indonesia pension system has not covered all Indonesia aged population yet, including the publicly managed pension system. Those several issues are considered in adequacy factors. In term of sustainability, Indonesia pension system is also not in a good shape. While GDP growth might seems good, the government debt will be a national budget burden and the pressure for the budget in getting bigger since the scheme used in Indonesia system is Pay As You Go (Taspen, Asabri, BPJS). The coverage of Indonesia pension system also still incredibly low and has so much potential to be expanded especially in informal worker. Thus, the Indonesia pension system can be improved by changing PAYG scheme to funded scheme, introducing a minimum level of support for the poorest aged individuals so there will be redistribution of income, and also providing more education, communication, and investment portfolio (better return) to attract more participants especially informal worker to increase participation.

# 1. INTRODUCTION

Pension plan in Indonesia has been existed since Dutch occupation period, then it was reaffirmed in 1956 by the first President of Indonesia after its independence in 1945. At that time, the pension program was only enjoyed by civil servant until 1966, army can also enjoy pension benefit under Law No. 6/1966. The regulation about civil servant pension program then renewed by Law No. 11/1969. Both civil servant and Indonesian army participate in defined benefit schemes pension plan with lump sum benefits and monthly pensions after retirement.

In 1977 the formal workers in private sector also participate in retirement program run by PT Astek which offered lump sum benefit at retirement. Then, in 1992, under the law No. 3/1992 the scheme was modified to a provident fund and PT Astek was changed into PT Jamsostek. Its programs were: old age savings, death benefit, work accident, and health insurance. It is mandatory for employer who has more than 10 workers and has payroll at least Rp1.000.000 to register the worker to Jamsostek Program.

Other than that mandatory program, there are voluntary occupational private pension programs which run by private companies based on Law No. 11/1992 known as Pension Fund Law. Companies can have its own pension fund that is separate legal entity from the parent company. There are two types of pension fund: Employer Pension Funds (EPF) known as *Dana Pensiun Pemberi Kerja* (DPPK) and Financial Institution Pension Funds (FIPF) or *Dana Pensiun Lembaga Keuangan* (DPLK). DPPK can be Defined Benefit (DB) or Defined Contribution (DC) paid by employer and the employee while DPLK is only DC scheme and paid by the employee itself, this can also be enjoyed by informal worker.

In 2015, Social Security Administrative Bodies (*Badan penyelenggara Jaminan Sosial* referred as BPJS) then implemented, replacing the previous social security administrators, PT Jamsostek. There are two types of BPJS: BPJS Health for health benefit and BPJS Employment which provide pension benefit, provident fund benefit, death benefit, and workplace accident benefit. Unlike PT Jamsostek which a state-owned enterprise, the BPJS is a public entity and reported only to Indonesia President.

Today, after several reformation, Indonesia pension system is still having major weaknesses and plenty of room for improvement according to Melbourne Mercer Global Pension Index 2019. Mercer using several indicators to calculate the pension index such as adequacy, sustainability, and integrity. Adequacy is benefits provided to both the poor and the median-income earner as well as several system designs features and characteristics which enhance the efficacy of the overall retirement income system. Sustainably considers several indicators which influence the long-term sustainability of current systems such as economic and demographic condition. Integrity considers three broad areas of the pension system, namely regulation and governance; protection and communication for members; and costs. Figure 1 below shows Indonesia pension system index score and grade.

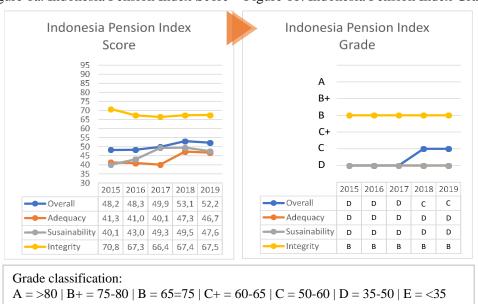


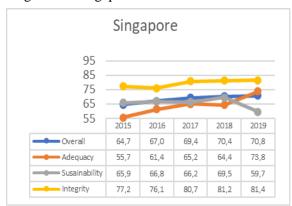
Figure 1a. Indonesia Pension Index Score Figure 1b. Indonesia Pension Index Grade

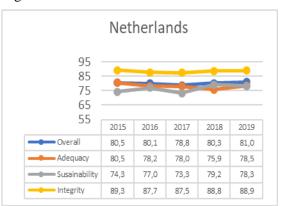
Source: Melbourne Mecer Global Pension Index (2019)

Indonesia pension index score is actually increasing over the years since its latest reformation in 2015, although slightly decreasing in 2019 (become 52.2) due to increasing life expectancy of Indonesia population (Mercer, 2019). However, those increases are not well enough considering the overall index grade is still C, meaning Indonesia pension system still far from ideal. In detail, the indicators that significantly impact this grade is the low level of adequacy and sustainability while the integrity consider good enough already. Comparing with the other country such as Singapore who has the highest pension system index score in Asia (overall score 70.8) and Netherlands who has the highest score in the world (overall score 81), Indonesia pension system is still far behind. Figure 2 below shows the index score for both countries.

Figure 2a. Singapore Pension Index Score

Figure 2b. Netherlands Pension Index Score





Source: Melbourne Mecer Global Pension Index (2019)

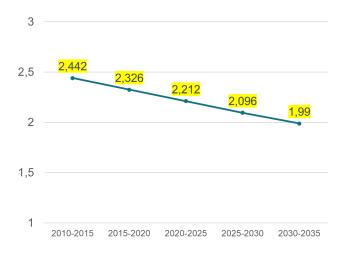
Considering the level of adequacy and sustainability of Indonesia pension system is still low. This paper will evaluate Indonesia pension system by seeing the sub-indicators from both adequacy and sustainability from Mercer calculation. From there, the suggestion of how pension system in Indonesia should be run can also be found. Factors included in adequacy score, among other things are the pension system design itself and benefit given to pensioners while factors included in sustainability considerations are demography, economic factors such as government debt and economic growth, pension coverage, and also total assets.

# 2. SUSTAINABILITY FACTORS

# A. Demography

Projection from Indonesia Central Bureau of Statistics, total population of Indonesia will increase from 238.5 million in 2010 to 305.6 million people in 2035. However, the average growth in 2010 - 2035 tend to keep declining. In 2010 - 2015 period, the population growth is 1.38 percent while in 2030 - 2035 in only 0.633 percent per year. The declining population growth is caused by the decline of birth rate (from 21 per 1000 population in 2010 to 14 per 1000 population in 2035) and the increase of dead rate (from 6.4 per 1000 population in 2010 to 8.8 per 1000 population in 2035). Indonesia total fertility rate (TFR) also projected to keep decreasing as figure 3 below shows.

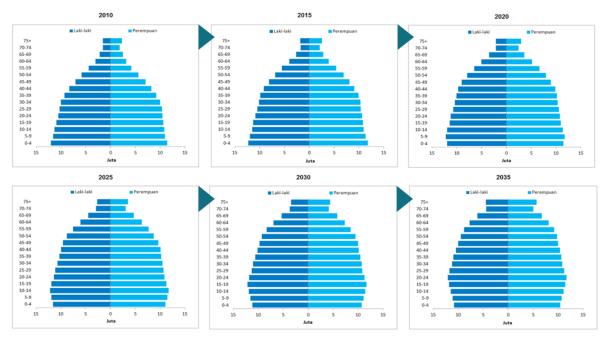
Figure 3 Indonesia Fertility Rate 2010 – 2035



Source: Central Bureau of Statistics (2018)

In 2035, the TFR will be 1.99, whereas the minimum TFR according to Melbourne Mercer is 2.1 for a population to replace itself. All these population dynamics lead to the many old generation in Indonesia population. In addition to that, Indonesia life expectancy according to United Nation (2019) will keep increasing from around 71 years in 2020 and will reach 72.2 years in 2035. So, it is not surprising that in the future, the proportion of old ages population (65+ years old) will be keep increasing from 6.2% in 2020 and reach around 11% in 2035. The increase of old generation can be shown in figure 4 that explain about the proportion of Indonesia population of all ages.

Figure 4. Indonesia Demography Pyramid



Source: Central Bureau of Statistics (2018)

The numerous amounts of old generation and decreasing of birth rate means Indonesia needs to be ready to have a sustainable system since there will be less and less working age population to fund the pension since Indonesia has pay as you go (PAYG) scheme until today. In addition, as mention earlier, Indonesia life expectancy today is around 71 years old while the pension age is 57. The pension will be increase one year per three years until maximum 65 years old. So, in 2035 the pension age is 63 years old and the life expectancy is 72.2 years old. All those facts indeed put a real pressure to the pension system itself since Indonesia still need to provide adequate benefit for all pensioners since the objective of the pension program is to provide a decent standard of living after retirement. Not only that, the urgency of better pension system also caused by bonus demography that Indonesia will have in 2030. By then, the productive population reaches its peak. That means the pension fund available will also be increasing significantly. Hence, Indonesia need better pension system and management so thus it can be optimally managed and beneficial on behalf of greater society in the future.

#### B. Indonesia Macroeconomic Outlook

In the last decade, Indonesia economy is growing with GDP growth around 5% and in 2019, total Indonesia GDP reach US\$ 1119.19 billion. However, during the 2020 Covid-19 pandemic, Indonesia GDP growth is -1% according to Asian Development Bank (2020). ADB then predicted that Indonesia economy will be recovered with GDP growth around 5.3% (see figure 5 and figure 6). Although this seems quite good, the increase level of government debt is a burden to national budget (figure 7). Thus, the fiscal sustainability is questions. This also will risk the sustainability of pension system in Indonesia especially for publicly managed scheme for civil servants, army, and police since the pension fund will be taken from national budget.

1200 1119,19 1100 1000 892,97 917,87 912,52 890,81 860,85 900 800 2010 2012 2014 2016 2018 2020

Figure 5 Indonesia Total GDP 2010 - 2019

Source: The World Bank (2020)

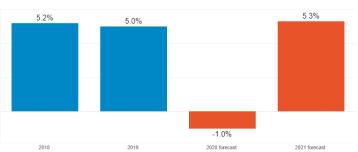
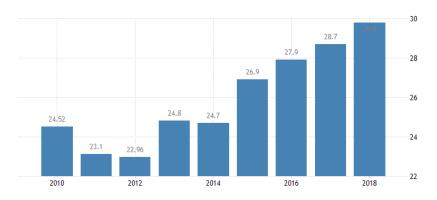


Figure 6. Indonesia GDP Growth

Source: Asian Development Bank (2020)

Figure 7. Indonesia Government Debt 2010 - 2018



Source: The World Bank (2018)

# C. Pension Coverage and Assets

The total participant for pension program in Indonesia is still low. Indonesia financial services authority (2018) stated only 35% of Indonesia worker joined Provident Fund Benefit Program and Pension Security by BPJS Employment even though it is compulsory. The amount is even less for pension fund, both DPPK and DPLK. The penetration rate is around 6% in 2018 as figure 8 below shows.

Pension Fund Participant 90.000.000 80.000.000 70.000.000 60.000.000 50.000.000 40.000.000 30.000.000 20.000.000 10.000.000 0 2015 2018 2014 2016 2017 ■ Total worker 67.045.43 68.036.47 70.233.07 75.149.17 77.144.67 ■ Pension Fund Participant 3.925.444 4.189.527 4.395.045 4.455.712 4.635.074

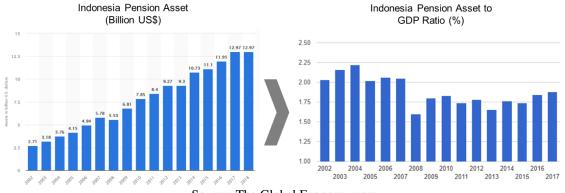
Figure 8. Pension Fund Participation

Source: Financial Services Authority (2018)

One of the factors influencing this low penetration rate is the fact that Indonesian still has low financial literacy and minimum knowledge of pension benefit. So, they often rely on their children or still working in their old age days. According HSBC's Global Research in 2018, 3 out 4 current working age population expect financial support from their children in retirement but only 1 out 4 current retirees receive financial support from their children. The increase of urbanization also contributes to this matter. Therefore, around 40% retirees in Indonesia are working again and take some actions to recover their standard of living such as rent out a spare room, sell possessions, diversify investment, and sell equity from home.

The low coverage of pension fund also might be consequences of the low development of the pension fund assets. Assets can be obtained from investment, return from assets investment, take over other assets, or even participant contribution (for DPPK and DPLK only). Over the years, the total assets own are not significantly increasing while there are so many potentials to expand the market and gets more participants. Although the assets value is keep increasing, the percentage of the assets to GDP is still incredibly low. Its only around 1.88% while based on 74 countries in 2017, the world average of pension assets was 29.66% with the highest value hold by Netherlands with 198.89% of GDP (see figure 9).

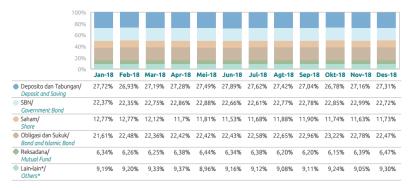
Figure 9. Indonesia Pension Asset and the Ratio to GDP



Source: The Global Economy.com

Furthermore, the return on investment that pension fund has since 2016 are slightly decreasing as shown in figure 10. Seeing from the investment portfolio, pension fund in Indonesia are invested in lower return instrument such as obligation and bank deposits (see figure 11). Regulation is not allowing Indonesia pension fund to invest abroad. The better investment management should be better than ever so it able to survive and it is important to in order to attract more participants.

Figure 10. Indonesia Investment Portfolio



Source: Financial Services Authority (2018)

Figure 11. Indonesia Pension Asset and the Ratio to GDP



Source: Financial Services Authority (2018)

# 3. ADEQUACY FACTORS: CURRENT INDONESIA PENSION SYSTEM

In some ways, Indonesia has different three pillars than other countries. Until today, there is no minimum pension benefit sets for all Indonesian people, even for the publicly managed one is not for everyone. Private sector employee, especially the informal worker needs to voluntarily register to the program, then they can get the benefit. While the public employees and private formal employees are registered by the employer. To better understand about it, here are the further explanation of three pillars in Indonesia pension system:

#### Pillar I: Public Pension Plan

In Indonesia, publicly managed pension plan is exclusive for government employees such as civil servants, police, and army. It is a mandatory program where the employer needs to register the worker into pension program. Though it is a publicly managed, it is not 100% supported by specific tax revenue. Every government employee needs to contribute to pension plan and will get the benefit after retirement thru defined benefit scheme. The contribution then collected by stated owned enterprises such as PT Taspen for civil servants and PT Asabri for police and army.

Although PT Taspen and PT Asabri are different entities who give security to different type of government employee, benefits and programs offered are relatively the same. There are several securities offered related to employment, namely: death security, workplace accident security, pension security, and old age savings. The benefit specified for pension are pension security which will be given monthly as monthly income and old age savings which will be given in lump sum when the employee reach retirement age or maximum three years after retirement. The contribution for pension security that employee must pay is 4.75% from monthly income (basic salary + family allowance) and for old age savings the contribution rate is 3.25% from monthly income (basic salary + family allowance). It cannot be withdrawn before retirement unless the employee is dead and already actively contributing for 2/3 of the program period.

The total contribution is relatively small comparing with other country. In Singapore, for special account (account that dedicated to old age, contingency purposes, and investment in retirement-related financial products) the contribution is around 6%. The low of contribution rate will directly impact the benefit received by the employee after retirement. Moreover, the calculation is based on monthly salary and not considering the inflation rate. This surely will not be enough to maintain the retiree's standard of living after they retired, especially the higher income employees. So, it is not surprising if they still working after retirement or doing some act to at least fulfilling their basic needs.

# Pillar II. Occupational Pension Plan

This pension program is managed privately by BPJS Employment. It is mandatory program for private formal employees including employees who are working in Indonesia for more than six months. Even though it is mandatory or private formal employees, government employees are allowed to add provident fund benefit program from BPJS Employment to their pension plan thru different scheme. So, there are two programs in BPJS Employment that related to pension, they are pension security and provident fund benefit program. Just like in PT Taspen and PT

Asabri, pension fund will be provided as monthly income and provident fund benefit program will be given lump sum after the worker retired or maximum three years after retirement with defined benefit, pay as you go scheme.

This privately managed pension program is quite fragmented. The pension security program and provident fund benefit program are only mandatory for all private formal worker, except for small enterprises with less than 10 workers, the employer is not obligated to register its worker. The informal sector worker is voluntary to join the program and can only join the provident fund benefit program with 2% contribution from reported income. The employer only mandatory to register them into death benefit and workplace accident benefit, in other words: not related to pension. This is indeed put the informal worker in very fragile retirement days.

The number of informal workers in Indonesia is much bigger than the formal one. In 2019, the number the formal sector worker is only around 55 million workers of whereas informal worker is more than 74 million persons, so it is around 35% more than formal worker. This supposed to be an opportunity to expand the BPJS Employment coverage in pension program. On the other hand, the effort to expand the coverage also means the more evenly distributed post-retirement income. Hence, it is getting closer to achieve the objective of national security itself which provide a decent life to Indonesian society when they retired.

For the formal workers along with the employers, they are obligated to pay contribution for the pension program, both pension security and provident fund benefit program. The contribution for provident fund benefit program is 5,7%, 2% from employees and 3,7% from employer. The benefit will be given lump sum when the worker enters pension age or maximum three years after retirement, dead, or permanently disable. The benefit also can be withdrawn before pension age if the employees already participate minimum 10 years. They can withdraw maximum 10% from their total balance for retirement preparation and maximum 30% of total balance for housing.

On the other hand, the total contribution for pension program is 3%, 1% from employee and 2% from employer. Other than monthly income, this pension benefit can be taken lump sum if the retirees do not meet minimum contribution period of 15 years, become disable after one month of participation, and dead and not meet the contribution period of 1 year. This pension program is calculated with basic salary and fixed allowance as consideration and using Rp7,000,000 of income as maximum number of calculations. Based on Government Regulation No. 45/2015, the minimum retirement income will be Rp300,000 and the maximum will be Rp3,600,000 per month. The amount is considered low especially for higher income workers (but the lower income worker is also will suffer). They will have some difficulties to fulfill their needs as the pre-retirement. The inflation also worsens this situation since the calculation has not consider inflation yet.

# Pillar III. Voluntary Pension Plan

Considering the low level of pension benefit by mandatory pension plan, the employee and employer can participate in voluntary pension plan under the Law No.11/1992 to get better retirement welfare. This private pension program can be sponsored by employers known as Employers' Sponsored Pension Fund (DPPK) or by the employee itself thru Financial

Institution Pension Fund (DPLK). Every employee is able to join DPPK as long as they are minimum 18 years or married and has been working for the company for minimum one year. On the other hand, the membership of DPLK is widely open for everyone, including informal worker.

Fully funded scheme is suggested for DPPK by the law. DPPK can be defined contribution or defined benefit. For DPPK defined contribution, the maximum contribution is 20% of the salary and cannot exceed 60% of the employer contribution. For defined benefit cannot exceed 2.5% x years of service x final average earning and cannot exceed 80% of the monthly principal salary. In DPPK defined benefit scheme, the investment risk is on the employer shoulder and the employee cannot charge the worker to cover the lack of fund. On the other hand, for DPLK, annual contribution of employees' maximum 20% of annual salary, but is they already join DPPK, then the contribution is 10% maximum. The investment risk is bear by the employees themselves. The income received from this pension benefit is subject to tax.

Due to the higher level of contribution, the pension benefits received by the retirees are also higher. Indonesia population are mostly Muslim and some of them are reluctant to participate in conventional financial institution. Therefore, since 2018 there are two pension fund who implement Syariah principle to accommodate this demand. Although, the participation rate is still exceptionally low, around 6% of total work force in 2018. This indicates that DPPK dan DPLK has not attract the Indonesian productive worker to participate. One of the reasons why is probably the fact that that the return on investment in this pension program have not favorable enough (other than the lower level of awareness and financial literacy indeed).

### 4. EVALUATION OF CURRENT PENSION SYSTEM

Indonesia pension pillars shows that Indonesia has very fragmented pension system. There is different system for different group of occupation maintained by different entities which implement different contribution and benefit. This system clearly will create pension income disparity towards the elders. Plus, Indonesia pension benefit calculation based on the basic income, which is varied across occupation, including public employee. Although it is varied, the pension benefit will not be enough to maintain living standard before retirement for nearly all group of occupation unless they enroll to the voluntary scheme with bigger contribution and benefit scheme. This system especially not well supported the informal employees. There is no system that guarantee informal worker retirement period will be at least decent.

Mandatory pension programs are using PAYG scheme including the publicly managed pension fund. This scheme can be a threat to the pension system itself due to the population dynamics of Indonesia in the future. In PAYG scheme the working population contribution will be used to fund the retirees' benefit. Increasing old aged population and the gap between pension age and Indonesia life expectancy make the pension system with PAYG scheme pressured. Unlike the funded scheme where the contribution will be invested. Indonesia pension system is pressured even more, especially the publicly managed one with the increase of government debt since the pension benefit will be fund from national budget. For the other scheme, the pressure is from the lower level of investment return since the portfolio investment is on the lower return instrument. Moreover, the ability of contributors to withdraw their fund before pension will affect the fund

available to pay for the retirees pension benefit and also will affect their own welfare in the pension period since they have no longer have the pension savings.

Until today, the participation rate to pension system is still low, especially the private pension fund. It is caused by Indonesian characteristics itself that still rely on family on their old aged days. The financial literation and awareness also still low. So, more education and communication are highly needed. Moreover, the low participation rate is due to the unattractiveness of the pension benefit itself. So, working population are more interested to save or invest their fund in other instrument, typically bank deposits or buy a property.

#### 5. RECOMMENDATION

Earlier section shows that Indonesia still have major weaknesses to the pension system in term of adequacy and the sustainability. Several ways can be done to fix those weaknesses and increase the overall pension system. First, from the system design itself. Indonesia need a system that could covered all the Indonesian and introducing a minimum level of support for the poorest aged individuals. This can be the Pillar 0 according to world bank pension pillars. This is publicly managed, noncontributory pillar. Still in system design area, Indonesia can try to use funded scheme instead of PAYG, this loosen the pressure of the pension system itself and less sensitive to the population dynamics. Second, for increasing the adequacy of the pension benefit, pension fund administrator and government need to increase the level of pension contribution within the workforce and increase the pension age. The increase of contribution means there are more fund available to pay pension benefit and increase of pension fund can loosen the burden since the old dependency ratio will be lower. Lastly, Indonesia government and pension fund administrator need to increase the education and communication to increase the awareness of the benefit and the importance of pension program. Also, pension fund provider needs to have better investment return so they can expand the business and their coverage especially to informal sector worker that have a huge potential.

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